

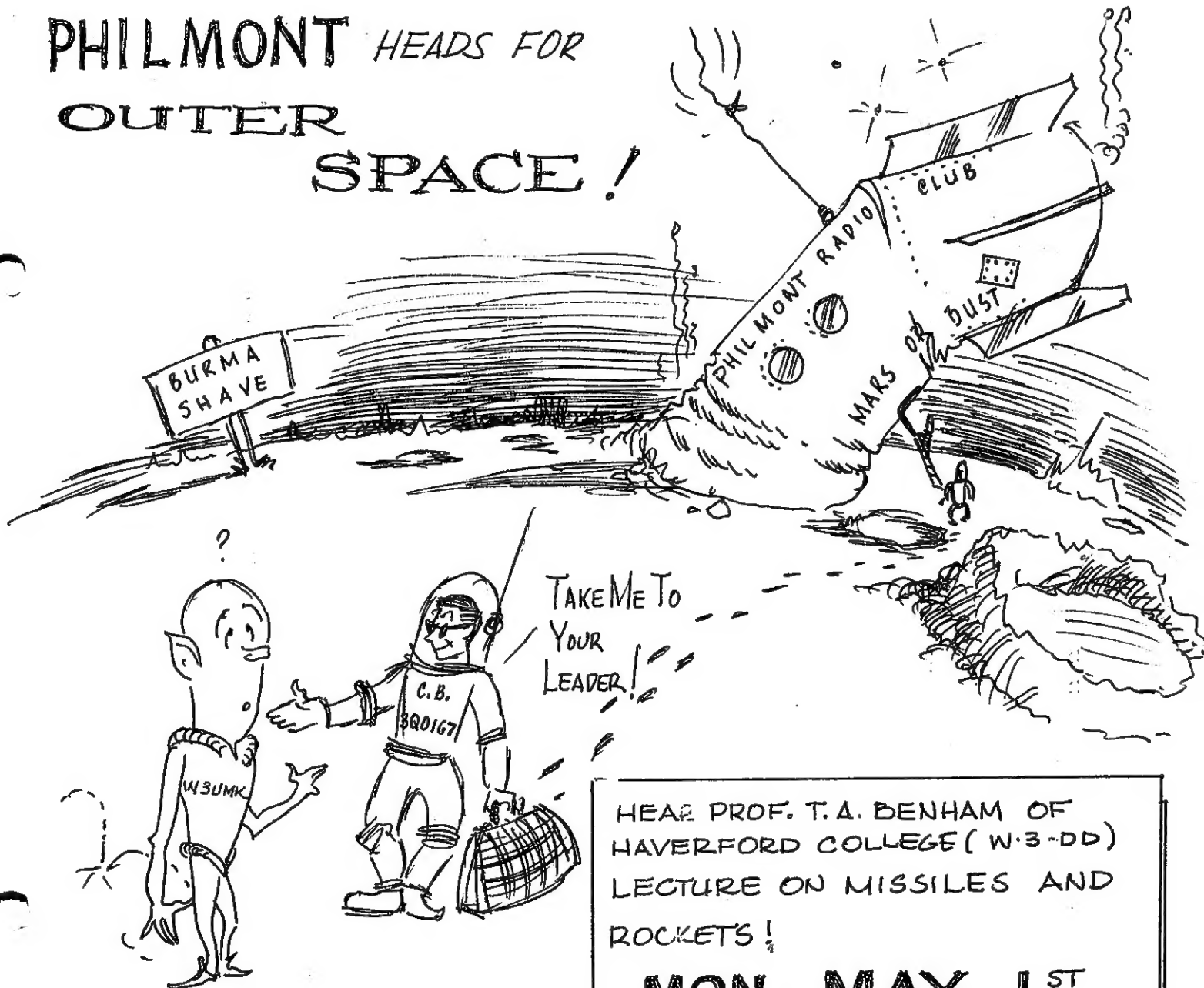


# THE BLURB

PHILMONT MOBILE RADIO CLUB INC.

MAY  
1961

PHILMONT HEADS FOR  
OUTER  
SPACE!



HEAR PROF. T.A. BENHAM OF  
HAVERFORD COLLEGE (W3-DD)  
LECTURE ON MISSILES AND  
ROCKETS!

MON. MAY 1<sup>ST</sup>

Published Monthly by the  
Phil-Mont Mobile Radio Club, Inc.

Volume 11 May 1961 No. 5

# EDITOR

Charles Stouth W3ZPP Tel. BR 9-3981  
261 Prince Frederick Road  
King of Prussia, Penna.

# STAFF

Publisher	W3LEM
Cartoonist	W3YHV
Technical editor	K3HLJ
New members chairman	W3CDY

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Superintendent	K3KUD
Boss Stitcher	K3DJE
Printer	K3GIM
Collator	W3QQH

The "Blurb" is published by and for the members of Phil-Mont to further the interest of Amateur Radio in general and mobile radio in particular. We endeavor to keep the news accurate, interesting and in a small way educational. Any deviation from this is unintentional. Copying and quoting is permitted, provided credit lines are included. Commercial use is not permitted and subscriptions are gladly exchanged with other radio clubs.

# DEADLINES

The "Blurb" is mailed on the last Monday of the month. All material for the "Blurb" must be received by the Editor, W3ZPP, before the 15th. of the month.

# 1961 CLUB OFFICERS

Pres.	Chas. M. Snyder	W3NIP
V. Pres.	Lloyd Sherman	W3CDY
Treas.	Chas. Greenwood	W3GOW
Sec.	Ed. R. Moore	W3EQV
Brd. of Dir:	W3's NIP, VVS, QQH, AMH, AK, DSG, WNC	
	and all 1961 club officers	

# MEETINGS

Regular meetings are normally held on the 1st. Monday of the month. Check the calander at right for the exact date. Meetings are held at the FRANKLIN INSTITUTE at 21st. and the Parkway, starting at 2000 hours (8PM)

# NET AND NET FREQUENCIES

Ch 1 - 29495 Kcs.	Ch 3 - Unassigned
Ch 2 - 29629 Kcs.	Ch 4 - 50.7 Mcs.
Scribbled Egg Net Weekdays	0730 - 0830
Ten on Ten Sundays	1000 - 1100
Blarney Sessions anytime	Ch 1 or 2
29493 Monitored Daily	0930 - 2400

for the benefit of mobiles in the Phila area.

# PMRC CALENDAR

May 1 REGULAR MEETING  
8PM Franklin Institute

# COMING MID-MONTH MEETINGS

MAY	W3AHP
JUNE	W3DJP
JULY	W3QQH
AUGUST	W3NIP
September	W3CDY
OCTOBER	W3GOW
NOVEMBER	K3GIM
December	To be
January	announced

SEND ALL COMMUNICATIONS FOR THE  
"BLURB" TO THE EDITOR W3ZPP



## THE PREZ SEZ

It is interesting to note that the same group of Phil--Monters seem to be conspicuous in just about all the activities. It is also significant therefore that the ones that are absent are usually the same ones--obviously! Now why is this? Everyone pays the same amount of dues and is therefore entitled to the same benefits. In my opinion some fellows are not getting their money's worth--they are being cheated.

Those who take advantage of all the activities offered in Phil-Mont are to some extent being subsidised by those who aren't. If you are one of those who are paying in, but getting only little out of Phil-Mont I'd like to suggest that you examine your investment. I have often heard the comment that if it weren't for the group of inactive members helping to pay the dues the active members would have to pay nearly three times as much! This may be true but note one other observation. If all those inactive members were active it would not follow that anyone would get any less. On the contrary-- every one would get even more out of Phil-Mont.

It is certainly lucky for all of us that a good number-- even if they are the same ones-- like to get in there and pitch in. Every one in Phil-Mont is a volunteer no one has to do anything. Those who seem to be "running things" need feel no real responsibility to entertain the group. However, I'm sure that many have wondered what they could do to improve the activities and attract more participants. We like your company and we'd like to see you around. Are there any suggestions, you may have that would make it more enjoyable for you? Are we leaving you out of some activity because we haven't made you welcome?

I'd like to suggest that we examine our membership lists and pick out some individuals that we have missed recently--extend the glad hand and get the gang together. The good weather will be here shortly so the excuses of the outdoors may pull us apart before we get together. Let's get together first.

W3NLP



Thomas Benham W3DD

The following information is borrowed from "Pack Rats Cheese Bits" because Helen Brick, the editor, did such a fine job.

The Mt. Airy V.H.F. Radio Club had at its meeting of March 15th. Professor Thomas Benham, of the Department of Physics, Haverford College, as guest speaker. "Tom" as he is better known to the ham, gave an interesting and informative talk on "Satellite Tracking". He played tape recordings he had made of signals from Sputnik 1 and other Russian and United States Satellites. More remarkable than the talk and recording is the fact that Tom has been blind since he was 2 years old. He is 45 years old, married for 19 years and resides with his devoted wife, Ann, and their three children, ages 13, 11 and 10 years, on the Haverford College. No. 5 College Lane, Haverford. Tom's achievements are almost unbelievable, especially in view of what most of us would consider a severe handicap. He was educated at the Pittsburgh School of the Blind, the Overbrook School of the Blind, Lower Merion High School, Haverford College and took graduate work at the University of Penna. He majored in physics and electrical engineering, and now holds a master's degree in each of these subjects. After his schooling he went with RCA for a time and was an instructor and is now a professor, in the Department of Physics, Haverford College, Haverford, where he has been for the last 20 years.

Tom's interest in Satellite tracking began in a modest manner with equipment in his own home, but the work was greatly expanded and is now continued in a trailer on the college grounds, with some very elaborate radio and teletype equipment. The expansion of the facilities was made possible with the help of students, interested friends and alumni, and other electronic firms and U.S. Government agencies. His station is on the monitoring lists of the National Aeronautics and Space Administration, Washington, D.C. and Doppler Shift Tracking Site, Aberdeen, Maryland. It is hoped the station will eventually have equipment representing a very advanced state of radio reception and capable of interpreting more of the information transmitted by the satellites and other space probes. In addition to his work at the college and his interest in satellite tracking, Tom is doing quite a lot of work in preparing and distributing scientific tape recordings to blind people in this country and around the world.

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#### OPEN HOUSE

An open house meeting and demonstration of CD Net Operation will be held on Thursday night May 4th at 7:30 PM at the Abington Township Building, York Road and Horace Ave. Abington, Pa. (just south of Abington Hospital) Amateur Radio equipment installed in the Township building will be on display.

Bob K3KUD

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#### GE HAM NEWS

Have you seen the new look given to "GE" Ham News? It now comes in 8½ X 11" size with holes punched in the left side for standard three ring binders, now they can be filed easily.



The following is a reprint of the information that is handed out before Tom Benham gives his disertation on Satellite tracking, explaining the reason forexplor- ing space.

### WHY EXPLORE SPACE

1. One of the most important reasons for exploring space surrounding the earth is to learn more about our atmosphere. Satellites have taken pictures of cloud formations in rapid succession over a very large part of the earth. They shve sent back information about the density of the atmosphere at various levels, about the heat received from the sun, the amount of heat returned to space by the earth. Fram a study of such data, scientiests may be able to understand the conditions that control our weather and climate.
2. We should learn as much about the sun as possible. The atmosphere interferes with this study, so it is necessary to get above it. One day, our fuel supplies here on earth are going to run out or perhaps be too costly to use. We must therefore, learn how to utilize the limitless supply of energy that comes from the sun. For example, there is enough energy from the sun falling on the roof of the average house to supply all the needs for power for the home. However, we have not yet learned how to make use of it economically.
3. Radio communication depends on characteristics of the ionosphere, a layer of charged particles lying 50 to 300 miles above the earth. We should know as much as possible about this layer so that better and more reliable communications may be provided in the future. Satellites are gathering data about this layer and transmitting the findings to earth.
4. World-wide radio, television and telephone communication can be made possible or improved through the use of passive and active relay satellites. Echo balloon was the first passive relay while Score and Courier were the first active relay satellites.
5. Man has wondered about the structure and formation of the universe and solar system for thousands of years. The earth's atmosphere obscures our view of the stars, burns up meteors that, if we could catch them, would give information about composition of "space" bodies, bends star light and causes it to twinkle, absorbs energy that might add to understanding if it could be observed, produces side effects that confuse the piture or even adds extraneous data. Satellites are collecting data that will improve our chances of learning more about the universe and solar system.
6. There are many phenomens existing in space that we know little or nothing about. If we knew more about them, we might be able to predict more accurately events of the past or future. Some of theseare, the distribution of magnetic field in space, the distribution of cosmic-ray energy and the origin of these rays, particules emitted from the sun, Several "Space" satellites have been sent up to return information about these things. So far, information from 22,000,000 miles away have been received.
7. Scientists are most anxious to test Einstein's laws of relativity. This can be done only in outer space and at tremendous speeds. Satellites and space probes should provide this opportunity.
8. Is ther life on other planets or elsewhere in the universe? Man won't rest until he knows more about this possibility.
9. Then there is man's insatiable appetite for the unknown. Why does he explore the north and south pole? Why does he insist on climbing to the top of dangerous mountains?



## WHY EXPLOR SPACE (cont'd)

10. There are many military advantages to be gained through the mastery of space. Satellites can be used to take detailed pictures of any part of the world, keep watch for rocket firings anywhere, give warnings of certain types of enemy activities, can carry nuclear or hydrogen bombs that may be released at will without the need to keep men flying endlessly around in airplanes, etc. It is not pleasant to contemplate this use of space exploration, but we must do it as a means of self-protection and perhaps, of self-preservation.

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## ORELAND, WYNDMOOR, FLOURTOWN, & ERDENHEIM

Attention all amateurs and R.A.C.E.A. members in the above areas please contact Dr. L. Pessel, 8204 Hull Drive, Wyndmoor (Phila.18) Phone: ADams 3-0106 Help is needed in establishing CD Radio Communications for Springfield Township. Do your part in this most worthwhile cause. Give "Doc" a call now.

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## COMPLAINT DEPARTMENT

We have received a complaint from one of our members (in writing) that the one page in which he was really interested in (Tek-ni-gram) is the one page he can't read.

First of all I accept the complaint. I do wish it had been sent to the editor of that department. Only he can see that fresh mats are used. There have been quite a few come to the publisher in sad condition, too late to be redone. In the future I am sure the technical editor will give this prime consideration and send only good, clean, fresh mats to the publisher for printing.

I would like to take this opportunity to ask the writer (anonymous) to put his writing talents to continued use each month and join the "Blurb" Staff.

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## ASSISTANCE

WJUNK. Dick Berens, has kindly consented to assist this editor each month by making contributions regularly. Dick has done most of the work on Channel Chatter this month. Many thanks Dick.

Let's try to get more people interested in contributing. When I am out of town for week or so meeting this monthly deadline is hectic.



## GENERAL INSTRUCTIONS FOR A "NET"

These instructions are by no means the answer to all the problems that arise when one is net control station. However, they may serve as a guide to new comers at the game of "The little man with the big switch."

Keep in mind you will be dealing with all kinds of individuals. Each has his own ideas, likes and dislikes. Some are considerate and others are not. Some are experienced operators, but the majority are not. These are the ones that must be trained. One must show a lot of patience with these beginners. There are many things they just don't know. If they receive the proper training at the very beginning they will turn out to be cracker-jack operators as time goes on.

1. When you assume NCS of a net, always be very prompt at net time. Check and re-check your net frequency and transmitter adjustment a few minutes before the net begins.
2. It is wise to select another station on the net at a distance from your location to act as your assistant. He will advise you (at the proper time of course) of stations that may be skipping over you. Select this station, or stations, at the beginning of the net. Make it known that these stations only should break the roll call. This will cut down on a lot of miscellaneous breakers. Try to select the most regular members with the best signals. It is very important that the NCS have a strong signal. The stronger the better. The NCS MUST have complete control of the frequency, if possible.
3. If a QSO is going on on the frequency at net time, come on at exactly net time and announce for all net stations to standby a few minutes. Most likely the receiving station of the QSO will hear the announcement and will advise his fellow ham to QSY or GRX. If he does not, announce again to the net to stand-by until they are clear. This is a rough situation to handle, but no doubt you will experience it sometime. If they insist on carrying on, then try to "break-in" and politely ask them to move as they are holding up the net. Don't forget to thank them after they agree to QST.
4. Let's assume the net frequency is now clear and you are ready for "roll call." Announce for all net stations to standby for roll call, then begin immediately. Allow only a few seconds for a station to reply. This will put all following stations on their toes for a quick response when it becomes their turn.
5. If a station with traffic checks in and the station to whom the traffic is going has already reported in, advise these stations to QSY off the net frequency without further calling the roll. After they have moved, then continue roll call. Keep all stations with traffic moving as quickly as their addressee reports into the net. If others must QSY have them go in the other direction from the previous ones. In some cases only crystals are available therefore they must QSY to a certain frequency. When roll call has been completed, handle all other late stations with traffic on frequency. Move all "informals" off net frequency.
6. No, doubt, you're going to have stations try to break the frequency to tell you so and so is calling during roll call. It is best to disregard all transmissions other than your assistants. After they see you are not going to acknowledge their transmissions, they will discontinue trying to break. This may seem a little rude at times, but you must stick to a definite rule regarding stations breaking in without permission. As net control station you are the boss. Always be polite, patient, and courteous but with a firm voice. By doing so, all net members will respect you and your directions much more. If you DO NOT exert your authority as NCS- confusion, chaos and delays will take over, and sometimes the situation may get out of hand. If this happens net members will soon lose interest in the net.

GENERAL INSTRUCTIONS FOR A "NCS" (cont'd)

7. After the roll has been completed, stand by for stations with traffic only. If a station says "break break" - you say "go ahead break station with traffic." If he breaks back and says "no traffic here" it's going to make him look kind of stupid to his fellow members after you just asked for stations with traffic only. Hit the "only" hard when you stand by.
8. The purpose of a traffic net is to exchange traffic between locations. This means moving traffic quickly as possible with the greatest degree of efficiency possible. Always give emergency traffic top priority.
9. It is up to the NCS to keep order and direct all stations on the net. This will be a big job, even for the experienced operator. Keep the net moving smoothly, but not too fast.

As stated before, you are dealing with all kinds of individuals, and must treat each in a different way. Once definite rules have been set up by the net manager and agreed upon by the NCS's - stick to them. Good luck, and keep the traffic moving smoothly.

75

Andrew C. Clark W4IYT/A4IYT  
SEC/Acting SCM Eastern Fla.  
American Radio Relay League

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A.R.E.C. NEWS

During the evening of April 5th W3DJW, W5RST, W3VSD, K3ELJ, K3GHW, W3UMK, W2BG, K3ECY and WA2NDK had a fine discussion of the Burlington County & Southeastern Pa. AREC operations. Burlington County has three weekly AREC nets, one on two, one on six, and one on ten. Message handling, technical discussions contest in handling traffic through heavy QRM are just part of the regular activities on this net. Burlington county has issued an emergency telephone calling list to their active stations, to expedite prompt action of all 3 nets. Because of the flat terrain in N.J. all 2 meter mobiles carry a bow & arrow & fishing line to get a coaxial antenna high on a tree as possible. Possibility of setting up a net in the Del. Valley to link all the county EC's was discussed. It was agreed that a future meeting of area EC's would be held just prior to annual Simulated Emergency Test. Coffee & doughnuts were served by W3DJW-EC's present, please note.

De W3UMK

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ADDITIONAL SWAP AND SHOP

For Sale HQ 129X Excellent condition very clean \$120.00

Bob W3OEC



# CHANNEL CHATTER

W3EQV commenting on visiting IRE show--- DJW planning to go--- K3KDP acquiring Elmacs, to replace a Transcon--- DJW re-building shack--- CW returning from a York Road club meeting with stories of home-brew equipment shown at their meeting--- WNC helped KDP install the Elmacs---AWH reported that 46 stations checked in on AREC net on March 16th---JIL attended three days of IRE show---ZEH, now active in the Western Division, is using a rig acquired from APD--- WIK was in the hospital in January---K3GBA worked WA2DTH (George) at Huntington on the North Shore of Long Island, with help from many including LNQ and QV---'speaking of beams, 'says ADF, 'I used to pray during every hurricane'--- We'll be praying for you too, Bill, if you're caught on the water during a real fall hurricane!---DJE and YJM heading for Drexel Hill, besieged by badinage from ADF and LSG---Ernie complaining about stick shifts, and cars that don't have hand brake in same spot--- you have company, Ernie. Who has visited Electronic Enterprises at 119 North Third Street, I mean, in addition to Spence? YHV and WNC play tag every morning at E. Falls Bridge and the Expressway, one high up and one low down--- WNC not too fond of Gonset receiver sensitivity --- Tony Fairbanks said no plans are yet firm'd up for JIL's next balloon ascent --- QGH enroute to a garage fire at Tannis and Meyer which QV had reported was extinguished before he arrived --HCK re-painted his mike and complained of its fragrance--- Armed Forces day, May 20th, affords the voice men a chance to brush up on c.w. ---see p. 36, April CQ--- AJO and OWK say they are going to build audio squelch per April CQ---KIK back from hospital after slight coronary and back on air---W3ZPP at sea on USS Sea Leopard---QZO's article in April QST have you read it?---AWH led Montgomery County AREC to fourth place, nation wide, in last fall's Simulated Emergency Test. SOB complimented YJM's net control abilities and deservedly---snow was reported by several during ten on ten on April 2nd---GBA heard K3GHJ/W/T five by five on ten on ten---TOV and GBA discussing underground antennas---IHM to install a new six meter antennas---BC's mobile gear still in the basement---what for?---heard on Sunday of all days---Does a straight flush beat four of a kind? Aresident of Penn Valley voiced the inquiry---QV researched the problem. ---CW blew a fuse at Atlantic City and EQV wondered what happened to him---W3HFX is the nemesis of two? ---I wonder why?---SRU plans to be active mobile on Field Day---WNC had honor of first contact with the new club rig at the Franklin Institute---W3RRM/Mobile three heard working HFY and discussing Ohio---CW is on 14055 mornings between 7:15 and 8:00 a.m.---a legal beagle kidding AWH about coaching witnesses---AWH likes the purring of his 100V---ADF fond of RM-2---suprised? YHV working (?) ch. one without antenna being vertical---HFY runs high power on VHF ---300 watts SSB on two, 200 watts AM on two and is this right, legal limit on six when using SSB? K3GBA was chaperoning W3RQZ and W3TKQ one on April 6th during business hours---such service the mobiles got that afternoon---K3GWM reported that he worked TKQ forty-five miles down toward Atlantic City---PXY discussing 'acoustical break' with OEC---VOK! W3PYF/M checked in on ten on ten from Nazareth on the ninth---YHV had two lovely days at sea on the pride of the navy while weather was fine---W3QZO/M made a wet entry into the Scrambled Egg Net the other morning and almost but net control to work, fortunately, he got car started just before YHV, who had gone off his regular route to aid him, reached his location---Sam- Bob is running 20 watts with a 2E26 in the final--sounds real good, too---K3MBF/Aero mobile checked in briefly on the SEN between NE airport and Wings Field---en route home, MBF said he was crossing the expressway near the TV towers, so DJE looked out his window and saw his plane's lights twinkling overhead---K3GWM is working on a modulator---YJM hears that some NPARC member adjourns to the Valley Inn in Skippack after club meeting for light refreshments, and feels that is a fine inducement to joining---a former active member of NPARC doesn't like socializing---on the other hand, Tom, W3Easy Does It, says we should do more socializing---



DEARBORN CRATCHE (cont'd)

Wardlaw's beef well-done and who likes it rare?---WPAAC banquet--- a family style-affair coming up --- decats \$2.75--- date is \_\_\_\_\_ and the place \_\_\_\_\_ Rumor has it our distinguished photographer, UWL, is not moving to Illinois--- JB visited the Alpine Inn for the stag dinner--- GOW chose that rainy night to run out of gas en route to WNC's---sympathy is belatedly extended---YEV, quite rightly, doesn't envy UWM if he was out on the tossing waters of the Atlantic during the big, rainy, snowy blow we had on the 13th-- what would we have had if it had been Friday the 13th?---KTY says that the combined Haverford-Broomfield CD forces are conducting their two meter transmitter hunts quite regularly-- wish you could have heard Jonesy describing location of hidden 10 meter Xmr & how YEA found it--he had many North Penn members in stitches---KJGWA and WJLEM worked K3MBF/AM prior to meeting time and called XYL by land line to have dinner ready--- W3FVI now a M.A.R.S. member---WJLEM had a clone call the other night, someone smoking a cigar talking to Ed and almost started a brush fire---W4VVS finishing his second floor---who's going to hang the paper Paul?---KJGWA reports hearing many signals from South Mountain Bethlehem, but none like KJGWA, a real potent one, Sam-K3RMX made RPL during March---Jon also has applied for a new call KV4CW---Congrats to Doc, W3HQJ on being installed as President of the American Association of Dental Schools---Thanks to W3ZLE for the information.-----

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## 1 1/2 VOLT TOOTHBRUSH

This new toothbrush may drive our electronic minded "painless parkers" into the TV repair business.

According to a trio of Long Beach, California Veterans Administration Medical Researchers the only charge for tooth repair in the future will be on the teeth themselves, rather than the dentist's bill.

Doctors Stowell, Taylor, and Wainwright used a toothbrush with a tiny 1 1/2 volt battery in the handle. Usually, very little fluorine stays on the teeth, even a slight rinsing washes most of it off the enamel. The reason is that both the teeth and fluorine carry a negative charge and like charges repel.

The battery-equipped toothbrush puts a positive charge on the teeth and the fluorine stays on the enamel long enough to penetrate.

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## DID YOU KNOW (By K3BCW Delmont BagChew)

Its a strong tail wind when a chicken lays the same egg more than once.

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TEK-NI-GRAM  
MAY 1961  
THE MOBILE INSTALLATION  
(Part 4)  
W3CDY

THE MOUNTING PLATE (Cont'd)

The inside plate and gasket have a bit more significance than is at first apparent. The mechanical consideration will be first.

In selecting the spot for the mount, you must allow room for the entire plate, or alter it to allow proper placement. The rubber gasket will absorb some of the curvature of the body, and further aid in giving you a more rigid mount. Furthermore the larger size of insulating and inside plate cover a larger area and consequently are more effective in supporting the area of the body where the antenna is mounted.

The electrical or second consideration gets extremely important as pointed out by the table on VSWR. The familiar type plate has the appearance of a huge washer with three holes to pass the mounting bolts and a large center hole to pass the center or mounting stud of the ball joint assembly. To this stud we will make our connection for the center conductor of the co-ax and the antenna proper. This plate may have a tapped hole for a grounding screw, which is turned into the body metal to make a good ground connection for the plate.

If there is no provision for grounding the plate on the inside be sure to provide some ground and do not rely upon the mounting bolts alone for a ground. This may best be done by cleaning an area around one of the bolts on the inside on the inside of the body and placing a thin wide strip of copper braid in contact with the clean area and passing a mounting bolt thru it. Place the inside rubber gasket in position, and fold the braid back, over the gasket and continue the bolt on thru the braid again and put the inside metal plate in position and bolt it into place. In this way the plate is effectively grounded and no additional washer is needed to protect the braid.

To further this need for a favorable VSWR, you must exercise the same care in connecting the shield or outer conductor of the co-ax. Cut and dress the cable to leave a length suitable for connecting the inner conductor to the mounting stud of the ball assembly and grounding the outer sheath of your co-ax to this inner metal mounting plate. Do this with a clamp if at all possible, and not a lead. The lead is not desirable as it may be inductive and cause detuning if it vibrates or shifts. Furthermore, a lead on the shield of the co-ax is mechanically not reliable and may break, causing you further grief.



## HAZARD NOTICE (Six Only)

Reports on explosions of Mercury Dry Cell Batteries have appeared in many recent publications...Although explosions have occurred on storeroom shelves by batteries standing idle, the greatest hazard exists, according to these reports.. An explosion can be caused by merely heating a Mercury Dry Cell Battery to 400 degrees "F". A short circuit across this type of battery for a FEW MINUTES will also usually cause it to explode.

Mercury Dry Cell Batteries generate HYDROGEN GAS toward the end of their useful life.. In the steel jacketed cell the gas can build up considerable pressure. An explosion occurs if this compressed gas is subjected to sufficient heat or to a spark.. The Multi-type units may cause an explosion sooner than a single cell unit, because one of the Multi- type cell may start to generate Hydrogen Gas, because one of the multi weaken condition, and a single spark from the rest of the unit, may and can cause a very dangerous explosion... Here are just a few of the many reported stories of explosions....

It seemed that on one instance, a 10.7 volt multi-cell Mercury Battery had started to hiss after being installed in a piece of test equipment, and the Technician who installed it quickly removed it--it exploded and the Technician said it sent pieces as far as 75 feet away. Now figure it out...STEEL JACKET HYDROGEN GAS & about 64% times its size in explosive power..... No time fuse, when and where, no one knows WHY, yes we do know--and we are going to try and help with these five precautions, which are recommended in handling Mercury Dry Cell Batteries:

1. Never discharge a Mercury Cell Battery after its voltage falls below 70% of it's nominal voltage (get rid of it)
2. Never place a Direct Short across a M/C Battery.
3. Never leave the Battery switch "ON" when the equipment is not in use, or when battery fails to operate the equipment.
4. Never retain exhausted M/C batteries (get rid of them) Don't give them to children to play with.....
5. Store spare M/C batteries in a Cool Dry ventilated area, and also make periodic inspections....

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## SWAP AND SHOP

For Sale \$300 KW final, 80-10 class C AM & CW---uses PP4-400 A's in final, modulates with PP 250 TH's. Self contained PWR supply, Modulator & final are completely TVI'd and shielded.

K3BWX Jon Balch  
311 Quarry Lane  
Haverford, Pa. MI 2-7444 or 29.493

For Sale Conset Super Six Converter Like new \$30.00  
Halliocrater UHF receiver S-27 Fair condition \$40.00

Bob K3DJE  
BR 5-6117  
HO 5-1000 Ext. 2827



## FRANKLIN INSTITUTE RIG

As you probably know, the Phil-Mont transmitter and base station was delivered to the Franklin Science Museum Monday April 3, 1961. Numerous comments have been received both pro and con. The major improvement noticed is in the receiving conditions. Nelson, W3DYP, no longer has to tune for signals. Either they break the squelch or they are not readable--it's as simple as that. There has been some comment on the quality of the audio, but QQH notes that the addition of the second remote will add 2 mfd across the line and possibly lower the frequency response. The rig was designed with reliability a prime factor. With this in mind, spare tubes were incorporated in one chassis. To maintain a full complement of spares and replace some of those contributed by QQH, the following of spares list of tubes is required as of 4/9/61:

2-2E26	2-12SK7	2-316	1-6U8
2-6AG7	1-12K8	1-6AW8	1-6X5
1-6BJ6	2-5R4GY	1-12AU7	

If you have any of these tubes and wish to contribute them to the Phil-Mont W3TKQ cause, please contact W3QQH, TU 4-8469

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## SWAP AND SHOP

1-Shure H1 Impedance Dispatcher type microphone and stand with A85C push to talk switch and S36A Stand and 20 ft. cable

QQH \$15.00

1- Hallicrafters VFO Model HT-18. 80 thru 16, AM, NBFM, CW with 3 additional crystals positions, An excellent VFO

QQH \$50.00

1- Elmac PMR-6 Vibrator power supply. 12 v dc input, 250 V @ 100 ma output. A dependable receiver and exciter supply.

QQH \$15.00

THE BLURB

A PHIL-MONT MOBILE RADIO  
CLUB PUBLICATION  
10 N. York Rd.  
Willow Grove, Pa.  
May 1961

Return Postage guaranteed  
Form 3547 Requested

TIME VALUE  
Meeting Notice